

13 JUL 2004

501,576

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
24 July 2003 (24.07.2003)

PCT

(10) International Publication Number  
WO 03/060015 A1

(51) International Patent Classification<sup>7</sup>: C09B 26/04, A61K 7/13, C07D 213/90

(21) International Application Number: PCT/EP03/00068

(22) International Filing Date: 7 January 2003 (07.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02405022.1 15 January 2002 (15.01.2002) EP

(71) Applicant (for all designated States except US): CIBA SPECIALITY CHEMICALS HOLDING INC. [CH/CH]; Klybeckstrasse 141, CH-4057 Basle (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ELIU, Victor Paul [DE/DE]; Im Lögelhardt 2, 79539 Lörrach (DE). FRÖHLING, Beate [DE/DE]; Im Stutz 10, 79585 Steinen (DE). HAUSER, Julia [DE/DE]; Walter-Wetzel-Weg 10, D-79639 Grenzach-Wyhlen (DE).

(74) Agent: CIBA SPECIALITY CHEMICALS HOLDING INC.; Patentabteilung, Klybeckstrasse 141, CH-4057 Basel (CH).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

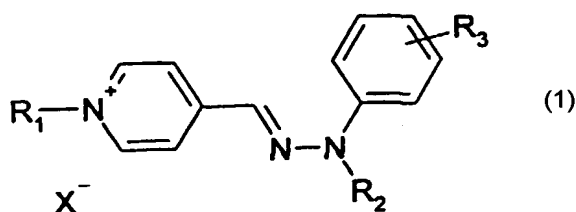
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- with amended claims

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: YELLOW CATIONIC DYES FOR DYING OF ORGANIC MATERIAL



(57) Abstract: The present invention relates to novel cationic yellow dyes of formula (1) wherein R<sub>1</sub> and R<sub>2</sub> are each independently of the other a C<sub>1</sub>-C<sub>8</sub>alkyl radical or an unsubstituted or substituted benzyl radical, R<sub>3</sub> is hydrogen, C<sub>1</sub>-C<sub>8</sub>alkyl, C<sub>1</sub>-C<sub>8</sub>alkoxy, cyanide or halide, preferably hydrogen and X is an anion, with the proviso that at least one of the substituents R<sub>1</sub> is a benzyl radical and R<sub>2</sub> is a methyl radical, R<sub>2</sub> is not hydrogen, also to compositions thereof, especially comprising other dyes, to processes for the preparation thereof

and to the use thereof in the dyeing of organic material, such as keratin, wool, leather, silk, cellulose or polyamides, especially keratin-containing fibres, cotton or nylon, and preferably human hair.

WO 03/060015 A1